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09/862,699	05/23/2001	Tatsuhiko Ibuki	Q64565	9797

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Washington, DC 20037-3202

EXAMINER
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SON, LINH L D

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Please find below and/or attached an Office communication concerning this application or proceeding.

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EXAMINER
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20050126

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**Commissioner for Patents**

Mr. Eric Hallber brought to our attention on January 21<sup>st</sup> of 2005 that the content of the application 09862699 was mismatched. Since Mr Hallber brought the error to the Office within a month of the reply set in the Office Action 12/21/2004, the period for reply of 3 MONTHS set in said Office action is restarted from the date of the mailing of this communication. See MPEP 710.06.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Audebert, US Patent No. 5937068, hereinafter '068.
3. As per claim 1, "a user authentication device to which a user information processor and an authentication information processor are connected over a communication network, wherein said user information processor comprises: a function unit for sending a first authentication number to said authentication information processor" is taught in '068 (Col 7 lines 45-53, and Col 8 lines 30-33); and "a function unit for converting the first authentication number to a second authentication number using a predetermined conversion rule in response to an access permission notification from said authentication information processor and for using the second authentication number as a new first authentication number" is taught in '068 (Col 8 line 57 to Col 9 line 54 and Col 10 line 63 to Col 11 line 30 (The number Kn gets converting to the

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password A which is used to authenticate with the server)), and “wherein said authentication information processor comprises: a function unit for making a check using a database in response to the first authentication number from said user information processor” is taught in ‘068 (Col 10 lines 1-48 (The server carries out the same conversion as the client by generating the same password using the similar variables from its memory correlating to the requested user device (DataBase)); “a function unit for sending the access permission notification to said user information processor if a user is authenticated as valid as a result of the check” is taught in ‘068 (Col 10 lines 10-19, and Col 11 lines 30-52 (the second authentication number); and “a function unit for converting the first authentication number to a second authentication number using the same conversion rule after sending the access permission notification and for recording the second authentication number into the database as a new first authentication number” is taught in ‘068 (Col 9 lines 25-38, Col 10 lines 43-48, and Figure 3, 28 ( $K_{n+1}$ )).

4. As per claim 2, “the user authentication device as defined by claim 1, wherein said user information processor comprises: a portable recording medium; a function unit for reading a first authentication number and a predetermined conversion rule from said portable recording medium and for sending the first authentication number to said authentication information processor; and a function unit for converting the first authentication number to a second authentication number using the conversion rule in response to the access permission notification and for recording the second

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authentication number on said portable recording medium as a new first authentication number" is taught in '068 (Col 7 lines 20-25, Col 11 lines 25-30, Col 10 lines 10-19, Col 9 lines 25-37, and Col 10 lines 1-10).

5. As per claim 3, "the user authentication device as defined by claim 1, wherein said user information processor comprises: a portable recording medium; and a function unit for reading a first authentication number from said portable recording medium and for sending the first authentication number to said authentication information processor, and wherein said portable recording medium comprises a function unit for converting the first authentication number to a second authentication number using a predetermined conversion rule in response to the access permission notification and for recording the second authentication number on said portable recording medium as a new first authentication number" is taught in '068 (Col 7 lines 20-25, Col 11 lines 25-30, Col 10 lines 10-19, Col 9 lines 25-37, and Col 10 lines 1-10).

6. As per claim 4, "the user authentication device as defined by claim 1, wherein said user information processor comprises: a portable recording medium; a function unit for receiving a first authentication number and sending the first authentication number to said authentication information processor; and a function unit for reading a predetermined conversion rule from said portable recording medium, for converting the first authentication number to a second authentication number using the conversion rule in response to the access permission notification, and for outputting the second

authentication number as a new first authentication number" is taught in '068 (Col 7 lines 20-25, Col 11 lines 25-30, Col 10 lines 10-19, Col 9 lines 25-37, and Col 10 lines 1-10).

7. As per claims 5 and 19, "a user authentication device to which a user information processor, a mediator information processor, and an authentication information processor are connected over a communication network" is taught in '068 (Col 12 lines 30-36, Col 8 lines 15-20, and Col 7 lines 45-64), "wherein said user information processor comprises: a function unit for sending a first authentication number to said mediator information processor" is taught in '068 (Col 7 line 65 to Col 8 line 5 (Kn)); "and a function unit for converting a second authentication number to a third authentication number using a predetermined conversion rule in response to the second authentication number from said mediator information processor and for using the third authentication number as a new first authentication number" is taught in '068 (Col 9 lines 25-37 (Kn+1)), "wherein said mediator information processor comprises: a function unit for sending the first authentication number to said authentication information processor, said first authentication number being received from said user information processor; and a function unit for receiving the second authentication number from said authentication information processor and for sending the second authentication number to said user information processor" is taught in '068 (Col 7 line 65 to Col 8 line 15, and Col 11 lines 40-53), and "wherein said authentication information processor comprises: a function unit for making a check using a database in response to the first

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authentication number from said mediator information processor and for sending the second authentication number to said mediator information processor if a user is authenticated as valid as a result of the check, the second authentication number being different from the first authentication number; and a function unit for converting the second authentication number to a third authentication number using the same conversion rule and for recording the third authentication number into the database as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, Col 9 lines 25-37, and Figure 3, 28 (Kn+1)).

8. As per claims 6 and 20, “the user authentication device as defined by claim 5, wherein said user information processor comprises: a portable recording medium; a function unit for reading a first authentication number and a predetermined conversion rule from said portable recording medium and for sending the first authentication number to said mediator information processor; and a function unit for converting the second authentication number to a third authentication number using the conversion rule in response to the second authentication number and for recording the second authentication number on said portable recording medium as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

9. As per claims 7 and 21, “the user authentication device as defined by claim 5, wherein said user information processor comprises: a portable recording medium; and a

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function unit for reading a first authentication number from said portable recording medium and for sending the first authentication number to said mediator information processor, and wherein said portable recording medium comprises a function unit for converting the second authentication number to a third authentication number using a predetermined conversion rule in response to the second authentication number and for recording the third authentication number on said portable recording medium as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

10. As per claims 8 and 22, “the user authentication device as defined by claim 5, wherein said user information processor comprises: a portable recording medium; a function unit for receiving a first authentication number and sending the first authentication number to said mediator information processor; and a function unit for reading a predetermined conversion rule from said portable recording medium, for converting the second authentication number to a third authentication number using the conversion rule in response to the second authentication number, and for outputting the third authentication number as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

11. As per claims 9 and 23, “a transaction system using the user authentication device as defined by claim 2, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication



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information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a terminal in a retail store, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card, and said authentication number is a credit card number" is taught in '068 (Figure 4, Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, Col 9 lines 25-37, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

12. As per claims 10 and 24, "a transaction system using the user authentication device as defined by claim 3, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a terminal in a retail store, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card, and said authentication number is a credit card number" is taught in '068 (Figure 4, Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, Col 9 lines 25-37, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

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13. As per claims 11 and 25, "a transaction system using the user authentication device as defined by claim 4, wherein said user information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a terminal in a retail store, said authentication information processor is a banking terminal, said portable recording medium is a cash card, and said authentication number is a personal identification number" is taught in '068 (Figure 4, Col 9 line 54 to Col 10 line 19, Col 7 lines 20-45, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

14. As per claims 12 and 26, "a transaction system using the user authentication device as defined by claim 6, wherein said mediator information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a user terminal, said mediator information processor is a sales center terminal, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card, and said authentication number is a credit card number" is taught in '068 (Figure 4, Col 9 line 54 to Col 10 line 19, Col 7 lines 20-45, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

15. As per claims 13 and 27, "a transaction system using the user authentication device as defined by claim 7, wherein said mediator information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a user terminal, said mediator information processor is a sales center terminal, said authentication information processor is a credit card company terminal, said portable recording medium is a credit card, and said authentication number is a credit card number" is taught in '068 (Figure 4, Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, Col 9 lines 25-37, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

16. As per claims 14 and 28, "a transaction system using the user authentication device as defined by claim 8, wherein said mediator information processor sends the first authentication number and an accounts-settlement request to said authentication information processor, wherein said authentication information processor executes the check and account-settlement processing, and wherein said communication network is the Internet, said user information processor is a user terminal, said mediator information processor is a sales center terminal, said authentication information processor is a banking terminal, said portable recording medium is a cash card, and said authentication number is a personal identification number" is taught in '068 (Figure

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4, Col 9 line 54 to Col 10 line 19, Col 7 lines 20-45, Col 7 lines 54-68, Col 10 line 66 to Col 11 line 9, and Col 11 lines 53-55).

17. As per claim 15, "a user authentication method comprising the steps of; (a) providing a user authentication device having an authentication information processor to which a user information processor is connectable over a communication network, (b) receiving a first authentication number from said user information processor" is taught in '068 (Col 7 lines 54-64, and Col 9 lines 64 to Col 10 line 10 (Kn)); (c) "making a check using a database in response to the first authentication number from said user information processor" is taught in '068 (Col 8 lines 15-23 (Extracting Kn)); (d) "sending an access permission notification to said user information processor if a user is authenticated as valid as a result of the check" is taught in '068 (Col 10 lines 10-18, and lines 48-53); and (e) "converting the first authentication number to a second authentication number using the same conversion rule after sending the access permission notification and recording the second authentication number into the database as a new first authentication number" is taught in '068 (Col 10 lines 44-48, Col 10 lines 1-10, and Col 9 lines 25-35), and (f) "letting said user information processor to convert the first authentication number to a second authentication number using a predetermined conversion rule in response to an access permission notification from said authentication information processor, and to use the second authentication number as a new first authentication number" is taught in '068 (Col 10 lines 44-48, and Col 9

lines 25-35 (Kn+1)).

18. As per claim 16, “the user authentication method as defined by claim 15, wherein said device causes said user information processor to perform: reading a first authentication number and a predetermined conversion rule from a portable recording medium and sending the first authentication number to said device; converting the first authentication number to a second authentication number using the conversion rule in response to the access permission notification; and recording the second authentication number on said portable recording medium as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

19. As per claim 17, “the user authentication method as defined by claim 15, wherein said device causes said user information processor to perform: reading a first authentication number from a portable recording medium and sending the first authentication number to said authentication information processor, and wherein said device causes said portable recording medium to perform: converting the first authentication number to a second authentication number using a predetermined conversion rule in response to the access permission notification and recording the second authentication number on said portable recording medium as a new first authentication number” is taught in ‘068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

20. As per claim 18, "the user authentication method as defined by claim 15, wherein said device causes said user information processor to perform: receiving a first authentication number and sending the first authentication number to said authentication information processor; and reading a predetermined conversion rule from said portable recording medium, converting the first authentication number to a second authentication number using the conversion rule in response to the access permission notification, and outputting the second authentication number as a new first authentication number" is taught in '068 (Col 9 line 54 to Col 10 line 19, Col 11 lines 40-65, and Col 9 lines 25-37).

### **Conclusion**

21. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-271-3856.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2100.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIR.I system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pzt-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Linh LD Son**  
**Patent Examiner**



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